

## **EARTHQUAKE**

## Description

An *earthquake* is a trembling of the ground that results from the sudden shifting of rock beneath the earth's crust.

## Related Hazards

Earthquakes may cause landslides and rupture dams. They also can generate tsunamis, which may strike the coastline thousands of miles from the quake. Severe earthquakes destroy power and telephone lines, gas, sewer, or water mains which, in turn, may set off fires and/or hinder firefighting or rescue efforts. Earthquakes also may cause building and bridge collapses.

## Geographical Considerations

Earthquakes occur along fault lines where massive plates of rock located beneath the earth's crust move against one another. Earthquakes have occurred in most areas of the United States. The most frequent earthquake events occur in States west of the Rocky Mountains, although historically the most violent earthquakes have occurred in the Eastern United States and in the Central Mississippi Valley. California is especially vulnerable because of its high seismic activity. Other highly vulnerable areas are Charleston, South Carolina, and the central United States (the New Madrid Seismic Zone), both of which were devastated by earthquakes in the last century.